

Section 3.2 Review

Section Summary

- The human body has 11 organ systems that interact with one another in order to perform the tasks necessary for survival and reproduction.
- The stomach is a major organ in the body's digestive system, which is responsible for taking in nutrients and breaking them down into a form that can be used by other cells in the body.
- The heart is a major organ in the body's circulatory system, which is responsible for moving gases, nutrients, and wastes in the body.
- The lungs are major organs in the body's respiratory system, which is responsible for gas exchange.

Review Questions

1. What features of the small intestine's structure help it accomplish its task?
2. In patients with cystic fibrosis, the duct joining the pancreas to the small intestine is often blocked. What effect might this have on digestion?
3. What do people mean when they talk about "food that went down the wrong way"?
4. Match the correct label to each letter on the diagram to the right.
 - a. deoxygenated blood to lungs
 - b. oxygenated blood to body
 - c. oxygenated blood from lungs
 - d. deoxygenated blood from body
5. At altitudes of 5500 m above sea level, the body has more difficulty functioning because there is less oxygen available to breathe. The highest city in the world is Wenzhuan, in the Himalayas, at an elevation of 5099 m above sea level. How does your knowledge of the circulatory and respiratory systems help you make a connection between these two facts?
6. Describe what happens in the alveoli.
7. Hyperventilation refers to breathing in and out deeply and rapidly. One effect of hyperventilation is to get rid of a large percentage of the carbon dioxide in your blood. A side effect is that your brain does not get enough oxygen, which may cause you to lose consciousness. Why might this occur?
8. Use cutouts or draw a diagram of the lungs, heart, and major blood vessels coming to and from them to show the relationships among these major organs. Using your cutouts or diagram, explain to a partner how blood gets to and from the lungs and what happens to the blood while it is in the lungs.

